

IN THE DRAWINGS:

Attached is a Submission of Replacement Drawing Sheets including a change to Fig. 1. These Replacement Drawing Sheets, which include all of Figs. 1-11 in this application, replace the previously-filed drawing sheets. In these Replacement Drawing Sheets, Fig. 1 has been amended to include the legend "PRIOR ART" in response to the objection to the drawings in the Office Action.

REMARKS**Summary of the Office Action**

A substitute specification in proper idiomatic English is required.

A new title is required because the title is allegedly “not descriptive.”

The drawings stand objected to because figure 1 allegedly should be designated by a legend such as “Prior Art.”

The drawings also stand objected to under 37 C.F.R. § 1.84(p)(5) as including a reference character not mentioned in the description: 34 and because they do not include a reference sign mentioned in the description 23 in [0138].

Claims 2-6 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite.

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nagayama et al. (GB 2 332 985 A) (hereinafter “Nagayama”).

Summary of the Response to the Office Action

Applicants have amended claims 3 and 4 and canceled claims 1-2 and 5-6 without prejudice or disclaimer. Accordingly, claims 3 and 4 are currently pending for consideration. Applicants have also amended the title and the specification in response to the associated portions of the Office Action. Also, a Submission of Replacement Drawing Sheets is concurrently filed incorporating an amendment to Fig. 1.

Requirement for a New Title

A new title is required because the title is allegedly “not descriptive.” In response, Applicants have replaced the previous title with a new amended title incorporating the Examiner’s helpful suggested new title at page 2, section [03] of the Office Action. Accordingly, withdrawal, of the requirement for a new title is respectfully requested.

Objection to the Drawings

The drawings are objected to because figure 1-3 allegedly should be designated by a legend such as “Prior Art”. In the Submission of Replacement Drawing Sheets filed concurrently herewith, Applicants have amended the drawings by labeling Fig. 1 as “Prior Art” in response to the drawing objection.

The drawings also stand objected to under 37 C.F.R. § 1.84(p)(5) as including a reference character not mentioned in the description: 34 and because they do not include a reference sign mentioned in the description 23 in [0138]. Applicants note that the instant application was filed with a specification that does not include paragraph numbering. However, Applicants understand that the Examiner’s reference to a paragraph [0138] was intended to refer to the paragraph beginning at line 15 of page 42 of the instant application’s specification. In the event that Applicants’ understanding is incorrect in this regard, clarification is respectfully requested in the next Office Communication.

In response to the drawing objections under 37 C.F.R. § 1.84(p)(5), Applicants have amended the paragraph beginning at line 15 of page 42 of the instant application’s specification to change reference numeral “23” at line 14 of page 43 to reference numeral --34-- to properly

refer to the common electron transport layer 34 shown, for example, in Fig. 11 of the instant application.

Accordingly, Applicants respectfully request that the objections to the drawings be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 2-6 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Office Action alleges that “[c]onstant ‘a’ is contained in all claimed formula and not limited by the claims.” To the extent that this assertion might be deemed to still apply to the claims as newly-amended, it is respectfully traversed for at least the following reasons.

Applicants respectfully submit that each of remaining claims 3 and 4 describe a combination of interrelated features including a directive that “a indicates the coefficient obtained from the shape of the gap filling part, respectively.”

Applicants respectfully submit that the actual value of the coefficient “a” depends on the type of the display panel. Equations (74), (76), and (78) at pages 40-42 of the instant application’s specification are examples that clearly direct those having ordinary skill in the subject art to the manner of determining the coefficient “a” for particular situations. Applicants respectfully submit that because the details of the coefficient “a” are particularly described in the specification of the instant application, the wording of currently pending claims 3 and 4 is sufficient clear and well understood by those having ordinary skill in the art in light of the instant application’s disclosure.

Applicants respectfully submit that all of the currently pending claims, as amended, fully comply with the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 112, second paragraph be withdrawn.

While Applicants believe that this issue has been resolved, to any extent that the Examiner might choose to maintain such an assertion, it would be particularly appreciated if the Examiner would offer a suggested approach for resolving this issue so that Applicants can better understand the Examiner's specific concerns in this regard.

Rejections under 35 U.S.C. § 102(b)

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nagayama. Claims 1-2 and 5-6 have been canceled without prejudice or disclaimer, rendering the rejections of these claims moot. In addition, previous dependent claims 3 and 4 have been newly-amended to each be rewritten in independent form by incorporating the features of previous independent claim 1 into each of these claims. To the extent that the rejections might be deemed to still apply to newly-amended independent claims 3 and 4, the rejections are respectfully traversed for at least the following reasons.

Applicants respectfully submit that, as described in the instant application's specification, for example, at the paragraph bridging pages 17 and 18, embodiments of the disclosure of the instant application, as described in the claims, have an objective to solve a problem in that the order of grayscale levels is reversed when the luminance lowers at pixels in which leakage of the electric current occurs. The Examiner appears to understand this advantage in his recommended amendment to the title at page 2, section [03] of the Office Action, for example.

Applicants respectfully submit that they are not aware of this problem ever having been considered before the solution described in the instant application was achieved by the inventors of the instant application. For example, Applicants respectfully submit that the cited Nagayama reference does not suggest this problem to any extent.

Applicants respectfully submit that, as defined by the equations particularly described in newly-amended independent claims 3 and 4 of the instant application, the number of grayscales K is utilized as a parameter in the determination of the sheet resistance of the gap filling part. Applicants note that this discovery is a significant achievement over prior art arrangements in the subject field of art.

Applicants respectfully submit that Nagayama merely describes that the conductivity of the gap regions of the high polymer layer is lowered. See, for example, the first aspect described in the second paragraph of page 3. Also, according to the second aspect, the gap regions are made insulating (or insulative). Applicants respectfully submit that the remaining features of Nagayama's disclosure are similar to the above-described features in connection with the first and second aspects of Nagayama.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because Nagayama does not teach, or even suggest, each feature of independent claims 3 and 4, as newly-amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Accordingly, Applicants respectfully submit that newly-amended independent claims 3 and 4 are in condition for allowance.

Requirement for a Substitute Specification

A substitute specification in proper idiomatic English is required by the Examiner in section [01] of the Office Action. Applicants and their representative have carefully reviewed the specification in this regard and have concluded that the specification of the instant application is already written in proper idiomatic English in its current form. Applicants and their representative were not able to find sufficient issues with the form of the written English in the instant application's specification that would rise to level of requiring Applicants to, in effect, rewrite the entire specification. In addition, the Examiner has not specified any particular instances of improper idiomatic English in the as-filed specification associated with the Office Action's requirement in this regard. Accordingly, Applicants respectfully traverse the Examiner's requirement for a substitute specification for at least the foregoing reasons. Withdrawal of the requirement to file a substitute specification is respectfully requested.

In the event that the Examiner might choose to maintain such a requirement, the Examiner is respectfully requested to provide Applicants with specific indications of enough instances of such alleged "improper idiomatic English" in the originally-filed specification that would rise to the level of reasonably requiring Applicants to, in effect, rewrite the entire specification of the instant application.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this

response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

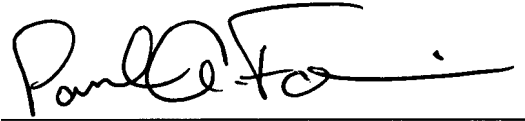
EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

DRINKER BIDDLE & REATH LLP

Dated: August 29, 2007

By:



Paul A. Fournier
Reg. No. 41,023

Customer No. 055694
DRINKER BIDDLE & REATH LLP
1500 K Street, N.W., Suite 1100
Washington, DC 20005-1209
Tel.: (202) 842-8800
Fax: (202) 842-8465